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COMMISSION

February 5, 2008

OVERNIGHT DELIVERY

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

Re: Case No. 2007-00509

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case, an original and six copies of the Responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's First Data Requests dated January 29, 2008.

Very truly yours,



Charles A. Lile
Corporate Counsel

Enclosures

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR AN ORDER DECLARING)
THE MAYSVILLE COUNTY LANDFILL GAS TO)
ENERGY PROJECT TO BE AN ORDINARY)
EXTENSION OF EXISTING SYSTEMS IN THE)
USUSAL COURSE OF BUSINESS)

CASE NO.
2007-00509

CERTIFICATE

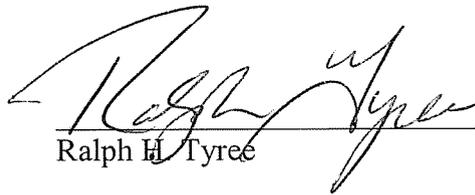
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STATE OF KENTUCKY)
)
COUNTY OF CLARK)

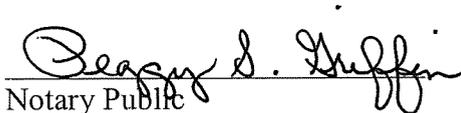
FEB 06 2008

PUBLIC SERVICE
COMMISSION

Ralph H. Tyree, being duly sworn, states that he prepared the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff Data Requests in the above-referenced case dated January 29, 2008, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.


Ralph H. Tyree

Subscribed and sworn before me on this 5th day of February 2008.


Notary Public

My Commission expires:

December 8, 2009

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

**APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR AN)
ORDER DECLARING THE MAYSVILLE-)
MASON COUNTY LANDFILL GAS TO) CASE NO. 2007-00509
ENERGY PROJECT TO BE AN ORDINARY)
EXTENSION OF EXISTING SYSTEMS IN)
THE USUAL COURSE OF BUSINESS)**

**RESPONSES TO COMMISSION STAFF'S FIRST DATA REQUEST
TO EAST KENTUCKY POWER COOPERATIVE, INC.
DATED JANUARY 29, 2008**

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2007-00509

COMMISSION STAFF'S FIRST DATA REQUEST DATED 01/29/08

East Kentucky Power Cooperative, Inc. (EKPC) hereby submits responses to the Commission Staff's First Data Request dated January 29, 2008. Each response with its associated supportive reference materials is individually tabbed.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2007-00509

FIRST DATA REQUEST RESPONSE

COMMISSION STAFF'S FIRST DATA REQUEST DATED 01/29/08

REQUEST 1

RESPONSIBLE PERSON: **Ralph H. Tyree**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 1. In response to Item 14 of the Commission's December 18, 2006 Order in Case No. 2006-00508, EKPC provided outage reports for its generating units, including its landfill units. For the 6 months ended October 31, 2006, Laurel Ridge Landfill Unit One ("Unit One") experienced over 1,150 hours of forced outages and Laurel Ridge Unit Five ("Unit Five") experienced over 2,300 hours of forced outages.

Request 1a. There appear to be several reasons for the outages at Unit One. Has EKPC ascertained any specific problems, beyond those identified in Case No. 2006-00508, that contributed to the forced outages at Unit One? If yes, describe the problems.

Response 1a. No. EKPC has not identified any specific reasons for the outages other than the reasons that were listed.

Request 1b. Provide a narrative description of the similarities and differences between the generating equipment proposed for the Maysville-Mason County Landfill ("Maysville-Mason") project and the generating equipment installed at the Laurel Ridge Landfill site.

Response 1b. The Maysville-Mason County Project is using a Caterpillar 3520 engine/generator (“3520”). This unit is of similar design to the Caterpillar 3516 engine/generator (“3516”) used at our other landfill gas sites, except it has 20 cylinders. The 3520 unit has a rating of 1.6 MW capacity, whereas, the 3516 unit has a rated capacity of 0.8 MW. The 3520 unit will utilize two fuel/air ratio controllers, whereas on the 3516 unit a manual control is used. The 3520 unit is estimated by Caterpillar to use about 25% less fuel than the 3516 unit, thus increasing the capacity of the site compared to a 3516 unit.

Request 1c. Case No. 2006-00508 indicates that, at Unit Five, most of the prolonged outages were due to lack of fuel. Lack of fuel has been an issue with some other EKPC landfill units in the past. Provide a detailed description of EKPC’s experience regarding pre-construction forecasts of fuel availability versus actual operational fuel availability at its existing landfill gas generation units. In the description, state whether EKPC revised its estimate of available fuel supply at the Laurel Ridge Landfill or revised its estimate of the useful lifespan of the Laurel Ridge site

Response 1c. EKPC believes that its pre-construction forecast is reliable. The issue does not appear to be the amount of gas produced by the landfill, but the efficiency of the gas collection system (which is owned by the landfill). EKPC is aware of this issue and is now actively involved at the Laurel Ridge, Hardin County and Pendleton County sites to improve the operation and maintenance of the gas collection system and well-field pump maintenance. EKPC is also considering hiring an outside contractor to provide well-field tuning and pump maintenance at the three aforementioned sites.

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EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2007-00509

FIRST DATA REQUEST RESPONSE

COMMISSION STAFF'S FIRST DATA REQUEST DATED 01/29/08

REQUEST 2

RESPONSIBLE PERSON: Ralph H. Tyree

COMPANY: East Kentucky Power Cooperative, Inc.

Request 2. Refer to Exhibit 1-3.0 of EKPC's December 12, 2007 application. The cost of the Maysville-Mason project's electrical energy is projected to be less than \$32 per MWh (net present value over the next 20 years). Provide all calculations made to arrive at the projected energy cost. Include with the calculations all assumptions made in arriving at the projected energy cost.

Response 2. The attached spreadsheet shows the forecast of generation, O&M expenses and fuel expenses through the year 2027. The net present value shown on the worksheet of \$29.19/MWH is less than the \$32/MWH cited in the Application. The \$32/MWH estimate was used to account for contingencies.

The major assumptions are shown in the lower portion of the spreadsheet; including fuel, O&M, depreciation, heat rate and discount rate shown on the left and the capital cost summary by equipment type shown on the right.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2007-00509

FIRST DATA REQUEST RESPONSE

COMMISSION STAFF'S FIRST DATA REQUEST DATED 01/29/08

REQUEST 3

RESPONSIBLE PERSON: Ralph H. Tyree

COMPANY: East Kentucky Power Cooperative, Inc.

Request 3. Refer to Exhibit 1-5.0 of EKPC's application, which indicates that an availability of 95 percent was assumed in deriving the 13,315,200 kWh expected annual hours of generation for the proposed Caterpillar engine. For each of EKPC's existing landfill units, provide the unit's assumed availability factor at the time EKPC sought a declaratory Order for the unit and the unit's actual availability factor from beginning of service to the most recent date available.

Response 3. EKPC assumed an availability factor of 95% at the time that a declaratory order was sought for each of the existing units. Shown below is the actual availability factor for each unit from the beginning of service to the most recent date available.

	2003	2004	2005	2006	thru Nov-07
Laurel Ridge LF Actual Availability Factor (%)	48.34	62.07	82.58	80.07	65.29
Bavarian LF Actual Availability Factor	61.72	93.74	95.68	96.73	94.44
Green Valley LF Actual Availability Factor	81.78	81.07	75.22	86.09	81.52
Hardin County LF Actual Availability Factor	n.a.	n.a.	n.a.	88.59	77.49
Pendleton County LF Actual Availability Factor	n.a.	n.a.	n.a.	n.a.	61.76

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2007-00509

FIRST DATA REQUEST RESPONSE

COMMISSION STAFF'S FIRST DATA REQUEST DATED 01/29/08

REQUEST 4

RESPONSIBLE PERSON: Ralph H. Tyree

COMPANY: East Kentucky Power Cooperative, Inc.

Request 4. Refer to Exhibit 1-6.0 of EKPC's application, which reflects its estimates of average annual costs for operations/maintenance personnel, equipment maintenance and supplies, and fuel for Maysville-Mason. For each of EKPC's existing landfill projects provide the estimated costs for the same categories of costs at the time EKPC sought a declaratory Order for the project and the actual annual costs, by calendar year, incurred since the project went into service.

Response 4. Please see the attached information.

	2003	2004	2005	2006	thru Nov-07
Bavarian					
Est. O&M, labor and fuel costs	168,000	343,000	352,000	361,000	373,000
Actual O&M, labor and fuel costs	43,301	337,754	364,085	349,304	306,797
Laurel Ridge					
Est. O&M, labor and fuel costs	280,000	388,000	437,000	453,000	469,000
Actual O&M, labor and fuel costs	38,211	264,402	378,820	292,528	247,662
Green Valley					
Est. O&M, labor and fuel costs	263,000	313,000	320,000	328,000	405,000
Actual O&M, labor and fuel costs	45,751	285,133	264,609	280,505	247,054
Hardin County					
Est. O&M, labor and fuel costs	n.a.	n.a.	n.a.	164,000	262,000
Actual O&M, labor and fuel costs	n.a.	n.a.	n.a.	331,856	312,101 *
Pendleton County					
Est. O&M, labor and fuel costs	n.a.	n.a.	n.a.	n.a.	297,000
Actual O&M, labor and fuel costs	n.a.	n.a.	n.a.	n.a.	348,619 *

* The loan for gas collection system is being expensed, whereas in the pro-forma it was capitalized which results in a higher fuel cost during the first 5-years of operations.

Note: In 2003, the commercial operation date for these units was later than originally projected.